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ABSTRACT

In January 1991 the Federal Minister of Employment and Immigration announced the establishment of the Canadian Labour Force Development Board (CLFDB) as Canada's national training board. Training boards at the provincial and local levels are still in the developmental stage. The lack of a national coordinating mechanism for all aspects of training in Canada until only recently is a reflection of Canada's unique historical context. Both the CLFDB and Canada's first provincial board in Ontario have taken elements from the national training boards of Germany, Sweden, the United Kingdom, and elsewhere and adapted them to the Canadian context. The following topics pertaining to the CLFDB are discussed in this report: enabling legislation, training board composition, training board structure and functions, finance, delivery of training, institutional planning and operations, testing and certification, and perceptions of training and training boards. Even though the reform of the Canadian training infrastructure and establishment of the CLFDB are too recent to permit any definitive assessment of their success, there is reason to hope that changing employer, government, labor union, and education/training institution attitudes will foster the development of a "training culture" such as exists in Germany, Japan, and elsewhere and will thus make it possible for the CLFDB to succeed. (Contains 26 references.) (MN)

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TRAINING discussion PAPERS

The effectiveness of Training Boards in Canada

by David N. Wilson

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I. Introduction

Canada has only recently established its national training board: The Canadian Labour Force Development Board. Training boards at the Provincial and local levels are in the developmental stage. The lack of a national co-ordinating mechanism for all aspects of training has been a reflection of Canada's unique historical context. One might easily describe Canada as the world's "loosest" federal state in terms of the powers reserved for provincial jurisdiction.

A. Background

1. Constitution

Section 93 of the Constitution of Canada has reserved responsibility for education to the ten Provinces, since Confederation in 1867. This constitutional provision means that Canada has no federal "office," or Ministry of Education. Moreover, for practical purposes one might characterise Canada as having twelve educational systems, i.e., ten provincial and two territorial systems. However, since about 1910 the Federal Government has encroached upon Provincial powers to assume a commanding responsibility to infuse federal funds into occupational training, through other constitutional provisions giving the federal government power to promote economic growth, equity and stabilisation.

2. Economic development

Canada evolved from a primarily agricultural and resource-extractive nation into an industrialised nation, largely, during the present century. This process of industrialisation began in the late 19th century, following completion of the trans-continental Canadian Pacific Railway. Industrial development between 1870 and 1910 paralleled the growth of cities as urban manufacturing centres. Industrial development accelerated during World War I to meet demand for war materials, since Canada became the armourer of British and Commonwealth forces. This growth continued with the post-war immigration spurt, but ceased after the onset of the Great Depression in 1929. The outbreak of the Second World War in 1939 precipitated industrialisation on a major scale to again meet Commonwealth armaments requirements.

By the end of the war in 1945, Canada was the fifth largest industrial nation in the world. The number of persons employed in the productive sector increased from a mere 181,679 in 1870 to 657,673 in 1939 to 1,239,327 in 1946. Currently, the total labour force is 13,807,000 with 12,358,000 employed and 1,449,000 unemployed. Since 1981, however, the majority of new jobs "created" have been in the service sector, rather than in productive sectors and account for more than 70 percent of total Canadian employment.

3. Education and training

Vocational and technical education were relatively slow in developing at the Provincial level. Nineteenth century curricula stressed academic subjects and only limited practical instruction was available in agriculture, art and commercial studies. Manual training was not taught in day classes until 1900, although evening classes for working people were available from the 1840s. A 1901 meeting between The Canadian Manufacturers Association, The Dominion and Labour Council, Boards of Trade and the federal government resulted in the appointment of a Royal Commission in 1910 to determine national technical education needs. Although the federal Ministry of Vocational Education proposed in the 1910 meeting never materialised, the 1913 Report of The Royal Commission on Industrial Training

and Technical Education recommended that the federal government allocate funding to the provinces to encourage the provision of vocational education in the elementary school grades. Implementation of these recommendations did not take place until after the First World War. Subsequent federal legislation extended grants to secondary and post-secondary education.

However, federal assistance actually began with the Agricultural Aid Act of 1912 and was followed by a succession of Acts, which provided federal assistance to, first elementary, and subsequently, to secondary and higher education, culminating with the current National Training Act of 1982. Precedents established from 1912 were: (1) national training needs were to be met by an influx of federal funds; (2) federal funds were contingent upon some type of federal control; and (3) funding was given directly to both the provincial governments and directly to training institutions. Successive acts by the Parliament of Canada alternated between providing funding to the Provinces and directly to institutions.

4. Current legislation

The 1982 National Training Act implemented many of the recommendations from two reports published in 1981: *Labour Market Development in the 1980s,* which was produced by a Task Force within the federal Ministry of Employment and Immigration, and *Work for Tomorrow: Employment Opportunities for the 1980s,* which was produced by a Committee of Parliament. These publications continued that fine Canadian "tradition" of in-depth (and often lengthy) study, prior to action, usually undertaken by Royal Commissions.

5. Related policies

A related policy development was the creation of a "social safety net" of benefits which is comparable to developments in Sweden and quite different from developments in the U.S.A. During the 1950s, a system of direct "baby bonus" federal fiscal transfers, later known as Family Allowance, inaugurated the Canadian social welfare system. These payments, literally, monetised isolated rural sectors that had, heretofore, not participated in an exchange economy. The addition of "Medicare" in the 1960s, in which federal tax-point fiscal transfers were made to support provincial health care programmes, and Unemployment Insurance for workers, completed the Canadian social programme infrastructure. In addition, federal tax-point fiscal transfers to support post-secondary education (universities and community and technical colleges) were enacted in 1967 as "Established Programmes Finance" (EPF) programmes. The Federal-Provincial Fiscal Arrangements Act of 1967 returns 50 percent of the operating costs of post-secondary education to the provinces.

6. Current economic conditions

Although Canada is the second largest nation in the world in geographic terms, its small population of 26.9 million has, historically, been concentrated along a 200 km. strip above the 49th parallel border with the U.S.A. Trade along the longest undefended border in the world has evolved into a trading partnership in which both countries constitute each other's largest trading partners. In 1989, this culminated in a Free Trade Agreement between both nations. Unfortunately, the resulting two-way traffic in ideas, as well as goods and services, has often operated to the disadvantage of Canada. Many technological innovations pioneered in Canada have subsequently been developed in (and claimed by) the U.S.A. This situation is due to the lack of access to development capital and competition with the U.S.A., which has ten times Canada's population and market size.

In spite of these constraints, Canada has evolved into a major trading nation. This evolution was, undoubtedly, aided by Canada's vast mineral, timber, petroleum and agricultural resources. However, the realities of current world market conditions are that a broad range of LDCs have begun to produce similar resources at significantly lower cost. This competitiveness has obliged Canada to accelerate the diversification of its economic infrastructure in

order to remain competitive on world markets. This diversification has been marked by (a) the modernisation of extractive and processing industries, (b) the development of high-technology, export-oriented industries, and (c) the development of viable and competitive service and informatics sectors. Canada exports about 25 percent of its Gross National Product (GNP).

Unfortunately, such diversification is accompanied by accelerated demands upon educational and training institutions to "produce" the calibre of workers required by "knowledge-intensive" industries and enterprises. While Canada's record in this regard is respectable, there are considerable problems which remain to be overcome. On the "success" side, the proportion of youth completing secondary schooling is increasing and more Canadians are entering post-secondary education and training. On the other hand, one major problem is that nearly 30 percent of all high school students drop out at the end of compulsory education (Grade Ten) at age sixteen. This is the poorest record among all major industrial nations.

Canada's record in supporting apprenticeship does not compare favourably with other industrialised nations. Apprentices comprise 1.1 percent of total employment in Canada, compared to 7.4 in Austria, 7.1 in Germany, 1.4 in the U.K., 1.0 in France and 0.3 in the U.S.A. According to the policy paper, *Success in the Works*, during the next decade "almost half of the new jobs will require more than five years of combined education and training beyond the completion of high school." The Canadian Labour Market and Procuctivity Centre (CLMPC) Task Force report noted that "some provincial training programmes ... simply duplicate those offered at the federal level while others pursue different - and sometimes contradictory - goals and priorities." These factors were noted to require "improved co-ordination between the federal and provincial governments."

Another major problem stems from Canada's "success" as a country welcoming immigrants. The waves of immigration since the end of the Second World War originally provided Canada with an adequately skilled labour force. However, one deleterious consequence of immigration has been that neither the provinces, nor the federal government, were obliged to "invest" in fully comprehensive and adequate occupational training systems. Changes to immigration legislation --plus sustained economic and social improvement in countries from which immigrants previously came -- have resulted in current waves of immigrants possessing few of the skills required for a "modern" economy. In addition, the contemporary Canadian labour force has an age structure which necessitates renewal. Labour force projections cited in the CLMPC Task Force Report indicated that the 15-24 year-old age group will comprise only 17 percent of the labour force in 2001, compared to 27 percent in 1974 and 20 percent in 1980. This renewal must comprise both enhanced pre-service training and retraining of existing employees being displaced by radically changing skill requirements. Current debate questions whether the Canadian' education and training infrastructure can meet both of these demands.

Reliance upon immigration to provide trained workers and complacency resulting from the long-standing exploitation of natural resources led to the failure to develop a firm commitment to training, or a "training culture." However, massive job losses during the 1981-83 economic recession appear to have begun the lengthy process of attitudinal change on the part of both employers and labour unions.

The Canadian Labour Market and Productivity Centre (CLMPC) was established in 1984 to facilitate co-operation between business and labour to address social and economic issues. Studies undertaken by the CLMPC have shown that (a) Canada lags behind most industrialised nations in its commitment to training, (b) while mining and other extractive industries could previously employ high school dropouts the increasing usage of sophisticated equipment and newer mining techniques require better trained workers, (c) jobs have declined in low-skilled primary occupations,

and (d) job growth has occurred in fields requiring high levels of education, e.g., managerial, professional and service positions.

The *Success in the Works* document noted that "a different kind of problem is the emergence of skilled labour shortages in many regions of the country." While the labour force grew by 300,000 per annum in the 1970s, growth forecasts reflecting population aging and decline indicate that in the 1990s only 180,000 will enter the labour force annually. Moreover, "36 percent of the members of The Canadian Manufacturers' Association and 43 percent of the members of the Canadian Federation of Independent Business report that they are facing shortages of qualified labour." The document also noted that "a recent survey by Statistics Canada showed that 14 per cent of Canadian manufacturers were facing production problems due to a lack of skilled labour." The lack of a "strong tradition, or 'culture' of training among Canadian businesses" was cited and it was indicated that "formal training is offered in about 25 percent of firms, mostly larger employers."

A perspective from organised labour presented to the CLMPC Task Force study indicated that "Canadian business spends less than 0.5 percent of payroll on formal training programmes for the employed labour force, less than half the level in the U.S., which in turn spends less than other advanced industrial nations." Moreover, they point out that "the little money that is spent in the 25 percent of firms which conduct formal training is concentrated in short-term courses which are in turn primarily delivered to managerial, professional and higher technical staff." This constitutes a shocking indictment of the state of employer-delivered training in Canada and highlights the lack of a "training culture."

The Association of Canadian Community Colleges (ACCC) defined the challenges facing Canada in 1990, as follows:

As the last decade of the 20th Century commences, a powerful new international economic system is emerging. Our former strengths were characterized by the sale of raw and processed natural resources and by the industrial capacity to transform those resources into value-added products. Competitive advantage in the new information-intensive economy is increasingly based on the products of research, science and technology, and knowledge, which itself has become a major resource.

With international competition driving us into the knowledge-based economy of the 21st Century, Canada will need to invest wisely in post-secondary education and human resource development.

7. Establishment of a National Training Board

In 1989, the federal government initiated extensive consultation with business, labour, social action groups and educational and occupational training representatives, as part of the federal Labour Force Development Strategy. These consultations were organised by The Canadian Labour Market and Productivity Centre (CLMPC) on behalf of the federal government. The CLMPC established seven Task Forces to examine "key aspects of federal training programmes." These Task Forces worked independently from government and were composed exclusively of representatives from the non-governmental sectors. The seven areas studied were: (1) older workers, (2) Unemployment Insurance beneficiaries, (3) social assistance recipients, (4) apprenticeship, (5) co-operative education, (6) entry-level programmes, and (7) human resource planning.

The primary objective of the federal Labour Force Development Strategy was to ensure that the Canadian labour force of the 1990s will be "highly skilled and capable of adapting to an evolving work environment brought on by technological and demographic change." *The 1990 Report of the CLMPC Task Forces on the Labour Force Development Strategy* contained a main conclusion indicating the "need to reform existing labour market policies and programmes" and that "new mechanisms be created to implement needed

labour market reforms." This led to the development of a second phase in which the CLMPC again brought together representatives of labour and business to consolidate the Task Force recommendations into a single proposal. In July 1990, the CLMPC Phase II report, *A Framework for a National Training Board,* was released.

The Phase II Report recommended that "a new national institution - a National Training Board - be created." In addition, in order to "shift greater responsibility for programme implementation to the local and/or sectoral level" a series of "Local Training Boards, which in many cases could be existing structures which have proven effective" were also recommended. It was noted that "broad provincial jurisdiction in the area of education and training means that the precise makeup and functions of these Boards in specific regions of the country can only be determined after extensive federal-provincial discussion and negotiation."

II. Legislation

In January 1991, the Federal Minister of Employment and Immigration announced the establishment of The Canadian Labour Force Development Board (CLFDB). However, his announcement indicated that "at the outset the board will discharge its mandate informally, rather than by legislation." The statement rationalised that it was "more important" that "the strong commitment and goodwill of all parties ... ensure the effective operation of the board." The Minister further noted that "in this way the board can gain experience prior to the legislation of its responsibilities and procedures."

While this is a somewhat novel approach, the Minister of Employment and Immigration probably has sufficient authority to follow this approach under existing enabling legislation. The 1982 National Training Act provided for an open-ended negotiation process between the federal and provincial governments. These negotiations result in agreements between the federal government and each provincial government for the financing of training throughout the life of these agreements. Wilson noted that this Act lent new meaning to the term "enabling legislation," since it facilitated any manner of agreement between the federal government and individual provinces on occupational training matters. The "asymmetry" of such federal-provincial agreements is also deemed facilitative of programmes tailored to the unique requirements of each region of Canada.

Federal-Provincial Training Agreements, under the National Training Act, specify the funds which the federal government will spend to purchase training "seats" in provincial training institutions, primarily community and technical colleges. The agreements also specify the detailed conditions of federal course purchases, what constitutes a "training day," and the rights of the federal government to refer clients from Canada Employment Centres (CECs) for training. Since 1985, these training agreements have been subsumed under the Canadian Jobs Strategy.

In 1989, Parliament enacted legislation to amend the Unemployment Insurance Act to re-direct funds from "passive income maintenance" support of the unemployed towards "active employment measures." These measures included:

(a) reinforcement of private sector training, by:

1. promoting human resources planning,

2. entry-level skills development,

3. industrial adjustment, and

4. the Community Futures programme for rural communities whose economies have been affected by changing market conditions;

(b) expanding "the present limited use of the UI programme for developmental purposes, as opposed to income support" by:

1. paying UI benefits to UI claimants attending approved training courses,

2. expanding assistance to welfare recipients to acquire skills,

3. updating skills of displaced older workers, and

4. providing assistance to UI claimants for training in self-employment, entrepreneurship and increasing relocation assistance;

(c) changing UI benefit provisions to:

1. improve maternity and sickness benefits,

2. extending UI coverage to those choosing to delay retirement, and

3. eliminating restrictions on access to benefits during labour disputes; and

(d) amending access to UI benefits by:

1. increasing the minimum work periods required for qualification and pro-rating benefits to regional unemployment rates,

2. reducing the maximum duration of benefits,

3. increasing penalties for those who voluntarily quit their jobs, and

4. increasing penalties for fraudulent benefits claimants.

Given the twin legislative mandates of The National Training Act and The Unemployment Insurance Act, which included authority for the Minister of Employment and Immigration to negotiate agreements with the provinces, it is likely that the decision to proceed with the establishment of the Canadian Labour Force Development Board without benefit of new legislation has legal standing. However, the delegated authority to disburse CD$800 million in re-directed UI funds does appear to place the CLFDB on questionable legal grounds.

Recent constitutional proposals announced by the federal government included the transfer of manpower training responsibility entirely to the provinces. However, the likelihood of this being realised is neither great, nor is the current constitutional impasse likely to be settled by such a radical restructuring of federal-provincial division of powers.

At the Provincial level, enabling legislation varies from one province to another. Responsibility for skills training is vested with either the Ministry of Education or post-secondary ministries in British Columbia, Nova Scotia, New Brunswick and Newfoundland. However, Ontario has three ministries responsible for education and training: The Ministry of Education, for elementary and secondary education, the Ministry of Colleges and Universities for universities and Colleges of Applied Arts and Technology (CAATs), and the Ministry of Skills Development, for apprenticeship and human resource planning.

These ministries negotiate with the federal ministry, Employment and Immigration Canada, to develop federal-provincial three-year Training Agreements under the National Training Act. This procedure appears to have continued for the establishment of provincial training boards. For example, negotiations established The Ontario Training and Adjustment Board in October 1991. A similar agreement was signed with the Province of New Brunswick. Negotiations are continuing with the provinces of Nova Scotia and Saskatchewan.

Under provincial legislation, charters have been granted for community and technical colleges, as well as universities. While most community and technical colleges are governed by distinct Boards of Governors, established by legislation, they have less autonomy than universities. In Ontario, a centralised Council of Regents affiliated to The Ministry of Colleges and Universities exercises control over the CAATs. There are 160 community, or technical, colleges, or institutes of technology, in Canada, with the smallest number of institutions in Prince Edward Island (1) and Manitoba (3) to the largest in Ontario (23) and Quebec (46).

Most community and technical colleges have had Trade/Industry Advisory Committees since the 1940s. Unfortunately, the record of participation and levels of viability of these Committees have varied considerably. While in some occupational areas, committees remain viable and continue to contribute to programme and curricular reform, in other areas committees have fallen into desuetude and often exist only "on paper." Some authorities consulted attribute the decline of Advisory Committees to their failure to have finite terms for members, which has often resulted in the prolonged participation of persons who have either lost "touch" with their areas, or were appointed for "political," rather than technical considerations.

The Ontario Ministry of Skills Development established The Ontario Training Corporation in 1988 as a "Crown Agency to stimulate training activity in the private sector and to promote training excellence in the workplace through the provision of business services and investment funds."

Although no provincial training boards have yet been established by legislation, a December 1991 Discussion Paper indicates

that The Ontario Training and Adjustment Board (OTAB) "will receive its authority through legislation and will be subject to the broad policy direction of government but will have independence in its strategic decision-making and day-to-day affairs." The "form of OTAB's legislation" is to be developed through a broadly-based consultation process with both provincial "interest groups" and "organisations delivering provincial programmes or services."

III. Training Board composition

The Canadian Labour Force Development Board (CLFDB) has 22 seats - eight for employers representatives, eight for labour representatives, two for educators/trainers, and four for social action groups, representing the four Employment Equity designated groups: women, disabled, visible minorities and Aboriginal people. Governments have *ex officio* status with the federal government represented by the Deputy Minister of Employment and Immigration (EIC) and five *ex officio* seats for provincial government representatives. Rather than having one representative for each of the ten provinces, these seats are to be allocated according to economic regions. The larger provinces of British Columbia, Ontario and Quebec will each have one seat, while the Atlantic Provinces (New Brunswick, Newfoundland, Nova Scotia, and Prince Edward Island) and the Prairie Provinces (Alberta, Manitoba and Saskatchewan) will share two regional seats. There are no representatives for the Yukon and Northwest Territories. In addition, the EIC Commissioner for Workers and the Commissioner for Employers, appointed under the Unemployment Insurance Act, will also serve on the board in an *ex officio* capacity.

The size of the CLFDB at 22 members was noted to "be large enough to accommodate key interests but not so large as to be unwieldy."

Employer representatives are identified by consultation between the EIC Commissioner for Employers and the Canadian Labour Market and Productivity Centre. Similarly, the EIC Commissioner for Workers and the CLMPC co-ordinate identification of labour representatives with national labour organisations.

Consultations co-ordinated by the Canadian Congress for Learning Opportunities for Women, the Coalition of Provincial Organizations of the Handicapped, and the Canadian Ethnocultural Council identify representatives of women, the disabled and visible minorities. The National Aboriginal Management Board and similar regional and local organisations designate the representative from the Aboriginal community.

The Association of Canadian Community Colleges (ACCC) co-ordinates major organisations in the education and training community to identify the two representatives of their community.

Each CLFDB member is appointed for a three-year term. However, in order to ensure continuity and account for changes in representation in each constituency, one-half of the initial slate of board members were appointed for five-year terms, upon the establishment of the CLFDB in 1991.

CLFDB decision-making has been established "on the basis of broadly-held consensus rather than by voting procedures."

While the CLFDB does not have an Executive Committee, per se, nor a single Director, or chair, a bi-partite chair structure has been established. One co-chair has been appointed from business and the other co-chair from labour. The current Business Co-Chair was President of The Canadian Manufacturers' Association (1985-1991) and the current Labour Co-Chair was Canadian National Director of the United Steelworkers from 1977-1991. Both Co-Chairs previously served as Directors of the Canadian Labour Market and Productivity Centre.

The CLFDB is supported by a Secretariat and research staff. In addition, the board can "draw upon the considerable resources of EIC, as required." Permanent and *ad hoc* sub-committees are to "deal with issues such as standard-setting for occupational groups, appren-

ticeship, retraining programmes for social assistance recipients, and specific sectoral training strategies and concerns." The Local Training Board Sub-Committee currently functions to assist Provinces with the establishment of local training boards.

The CLFDB was designed to "function with maximum independence." This was noted to include setting "its own agenda, determine its own priorities and select its own staff."

The Ontario Training and Adjustment Board (OTAB) is to have a Governing Body of 24 members, co-chaired by business and labour, with the following composition:

- 8 business representatives, nominated by provincial business and sectoral associations;
- 8 labour representatives, with seven nominated by the Ontario Federation of Labour and one nominated by the Ontario Building and Construction Trades Council;
- 4 representatives from provincial social action organisations (representing women, disabled, racial minorities and aboriginal peoples);
- 2 representatives from the education and training sector (one from the Colleges of Applied Arts and Technology [CAATs] and one representing local School Boards);
- 1 provincial and 1 federal government representative *ex officio* and non-voting.

Appointments to the governing body are to be made by the Ontario government "using a nomination process developed by each labour market partner and consistent with provincial guidelines for public appointments."

The OTAB composition also includes four permanent councils, or sub-committees, "to support the governing body and provide leadership to the agency." Each council is to "have the latitude to establish task groups or committees where required." The councils are"to be highly interactive with one another." The four Councils are the:

- Workplace and Sectoral Training Council
- Apprenticeship Reform Council
- Labour Force Adjustment Council
- Labour Force Entry/Re-entry Council

While the initial council will be selected by the provincial government from nominations made by provincial and community organisations, future nominations will be made by the Governing Body. Each council's composition is to be quadripartite, similar to that of the Governing Body with two exceptions. The Labour Adjustment and Entry/Re-entry Councils are to "have combined education/trainer and social representation equal to business and labour (i.e., 8+8+8, rather than 8+8+6)." In addition, it has also been suggested that OTAB staff be represented on each council and that "a significant proportion of council members be drawn from local boards." These inclusions are currently under discussion.

IV. Training Board structure and functions

The *mandate* of the CLFDB was noted to:

- provide an effective and authoritative forum for establishing broad standards of access to training while ensuring the quality of programmes available;
- serve as a valuable tool for forging broad consensus on national training priorities and strategies;
- be critical to establishing local and/or sectoral training boards that ensure that national standards and priorities are translated into programmes at the community level that are responsive to the training needs of Canadians.

The board is supposed to "play a critically important role in developing a strong training culture" and "play a lead role in developing a commitment to training excellence in Canada." This was noted to involve "resolving differences in standards of occupational competence and certification." In addition, the board was mandated to "provide advice and recommendations to Employment and Immigration Canada on the priorities for use of funds in support of sectoral human resource planning initiatives."

The board's mandate is supposed to "evolve as it gains experience." In addition to responsibility for "setting national training priorities," and "improving the quality and cost-effectiveness of training," the board is supposed to develop "the annual expenditure plan for Developmental Uses under the Unemployment Insurance Act."

The *functions* of the CLFDB were divided into three categories: advocacy and promotion, advising, and recommending, as follows:

Advocacy and promotion:

- create links between educational and training systems;
- ensure high quality counselling services;
- encourage and assist sectoral and community training initiatives.

Advising:

- advise governments on training policy, including standards for vocational and other training and programming required to meet long-range labour market goals;
- assess the current level of workplace training in terms of quality and quantity, in part by working toward a common definition of training;
- collect and disseminate training and training-related labour market information;
- monitor and evaluate training programmes.

Recommending:

- develop standards for skills training and certification to promote access and portability;
- develop eligibility criteria for income support for training programmes;
- set standards of equity and access to training programmes;
- establish guidelines on the allocation of funds for skills training.

The CLFDB is to "provide advice and recommendations to the Minister of Employment and Immigration on federal training activities." In turn, the Minister "will submit board reports to the Parliamentary Standing Committee on Labour, Employment and Immigration."

While the CLMPC Phase II report recommended that the board be called the National Training Board, it was decided by the EIC to change the name to the Canadian Labour Force Development Board. "This change reflects the fact that the board's responsibilities will not be limited to training, but will extend

to other areas such as industrial standards and inter-provincial certification of trades people."

While the CLFDB is centralised at the federal level, it is planned to decentralise, through the creation of "complementary non-governmental structures at the provincial and sub-regional levels." This decentralised structure is designed to "create the means through which all governments and the labour market partners can establish closer partnerships to increase the amount and improve the quality of training in Canada."

The rationale provided for the decentralised structure noted that "training takes place at the local (or sub-regional) level." Therefore, "federal training expenditures for skills training will be decentralised so that spending decisions are more closely in line with the training needs of individuals and the priorities of local labour markets."

The CLMPC Phase II report recommended that "non-governmental mechanisms be encouraged at the sub-regional level." Their mandate is "to guide and direct the operation of training programmes within broad national guidelines, setting out clear standards of equity, quality and effectiveness." The responsibilities of these decentralised boards include:

- developing local skills training plans;
- identifying training providers for purchasing training to best fit the needs established;
- committing government funds made available under contribution agreements.

The prime functions of provincial training boards are to be:

- providing independent judgements on the value of federal and provincial training efforts in the province;
- advising on training priorities and the degree of co-ordination, overlap, duplication or gaps between federal and provincial programmes;
- advising on the best way for federal and provincial governments to adjust their patterns of expenditure in a province.

While it is intended that "the composition and membership selection process of the CLFDB should be broadly reflected at the provincial and sub-regional levels," the CLMPC Phase II report suggested "that variations in this configuration" would "be appropriate in different parts of the country."

The federal government is to be represented on provincial and sub-regional boards in an *ex officio* capacity, since these boards "include federal programmes and expenditures." In addition, federal representation will facilitate the "need for co-ordination and significant information sharing among sub-regional, provincial and national boards."

The creation of sub-regional training boards, to complete the recommended hierarchy and replicate the three levels of government in Canada -- federal, provincial and local - was also envisaged in the CLMPC Phase II report. Their recommendations were accepted by the federal Minister of Employment and Immigration, who hoped that "by 1994, there will be sub-regional boards to assume responsibility for local skills training in most parts of the country." It is reasonable to assume that many of the existing Training Advisory Boards, usually associated with community and technical colleges and/or labour unions, may be co-opted into the new hierarchical structure, under the co-ordination of provincial training boards and the federal CLFDB. The Ontario Training andAdjustment Board envisages the establishment of 22 local boards in Ontario.

The CLMPC Phase II report noted that "the definition of 'local' is a complex matter." Accordingly, they recommended that "the 62 economic regions under the Unemployment Insurance Act be used" to define the "geographic sphere of operation of sub-regional boards."

While the recommended federal-provincial-local hierarchy of training boards should address issues of the co-ordination of training activities and sharing of information, "it is not expected that the national, provincial and sub-regional" boards will "operate on the basis of one board level having supervisory respon-

sibility for another level." It was felt that "a formal supervisory role would dampen independent judgements from labour market partners and discourage the most respected non-governmental leaders from participating."

In December 1991, The Ontario Training and Adjustment Board (OTAB) became the first provincial-level training board to be announced under this decentralised structure. Since OTAB remains under discussion at the time this case study was prepared (consultations end in April 1992), all descriptions and analyses in this document are subject to change.

According to the discussion paper, *Skills to Meet the Challenge: A Training Partnership for Ontario,* OTAB is to be "an autonomous agency of the provincial government with the authority to make design and funding decisions on publicly funded training and adjustment programmes and services, within criteria set by the provincial government."

The OTAB mandate is to "assume direct authority for Ontario's publicly funded training and labour force development programmes." Following transfer of management responsibility for existing programmes, OTAB is to "begin the challenging task of reforming provincial programmes and delivery systems." The "broad mandate" is to ensure that:

- Ontario's labour force development programmes are designed, delivered and assessed in accordance with the various training needs and priorities of

Ontario's economic objectives, its employers and its current and potential workers;

- higher levels of private sector investment in training are achieved and sustained, comparable to or surpassing leading international levels;
- programmes and services are better co-ordinated to improve access, equity and participation for all Ontarians.

The principal functions of the OTAB Governing Body are to:

- establish the overall direction of the agency;
- provide strategic leadership and direction to the agency's executive staff on programme and management issues as well as approve executive hiring decisions;
- negotiate with government the agency's memorandum of understanding and successive multi-year corporate plans, as well as report as prescribed to a Minister on progress in accordance with those plans;
- make programme design and funding decisions within each of OTAB's spending envelopes, reflecting provincial and local labour force priorities, geographic considerations and economic circumstances;
- act as the formal body in conducting relationships with the CLFDB and designating local boards.

The primary objectives of the four OTAB Councils are to:

- recommend programme design developed by OTAB's staff, for approval of the governing body;
- develop guidelines and criteria for funding decisions to be made by the agency's management under the direction of the governing body;
- ensure that the agency's programmes and services are responsive to the needs of different localities, communities, sectors and clients across the province;
- provide expertise and recommendations to the governing body during the development and negotiation of the agency's multi-year corporate plans;
- fulfil management and partnership responsibilities unique to their particular functional areas, such as reviewing apprenticeship regulations or development of sectoral or inter-employer training agreements and consultations.

V. Finance

To disaggregate expenditures on education and training in Canada is a complex undertaking. In global terms, Canada spends more than seven percent of its Gross Domestic Product on education. Total expenditures at all levels (elementary, secondary and post-secondary) by the federal government, provincial governments and local school boards were estimated at CD$37.4 billion in 1988-89. Of these, 1988-89 expenditures on elementary and secondary education totalled CD$26 billion. In 1989-90, combined federal and provincial support for post-secondary education totalled CD$10.5 billion. The Canadian Dollar currently fluctuates between US$0.83 and US$0.88.

Federal government training expenditures under the Canadian Jobs Strategy were CD$1.8 billion in 1988. Unemployment Insurance (UI) benefits paid to provide temporary income support were about CD$11 billion in the same year, with only CD$255 million, or two percent, spent on training, or retraining, of the unemployed. The Labour Force Development Strategy, announced in 1989, was "designed to shift the current balance of UI expenditures" from "passive income maintenance to more active measures, such as skills training." This policy was intended to "redirect approximately $1.3 billion, or ten percent of the programme's total expenditures beginning in 1990." Of this redirected amount, "$800 million ... will be allocated to upgrading the skills of the labour force."

The *Success in the Works* policy paper noted that "overall, the private sector in Canada spends about $1.4 billion on formal training, less than half of the United States on a per-employee basis."

Under the Canadian Jobs Strategy, the federal government has purchased apprenticeship courses from provincial training institutions, as well as provided income support for apprentices through the Unemployment Insurance Act. In 1987-88, 47,500 apprentices participated in federally-sponsored institutional training at a cost of CD$84.5 million, plus CD$80 million in income support through UI. These data indicate a significant decrease in federal expenditures which has also resulted in a decline in the number of apprentices supported by federal funds from 72,800 in 1982-83 at a cost of CD$88.5 million. In 1985-86, provincial support for apprentice training totalled CD$23.2 million. These funds are in addition to federal expenditures.

The Canadian Labour Force Development Board is mandated to establish guidelines for the allocation of federal skill training funds and recommend priorities for the use of these funds to Employment and Immigration Canada. This includes the development of an annual expenditure plan for funding under the Unemployment Insurance Act. The CLFDB is to advise federal and provincial governments on the adjustment of their expenditure patterns for training.

The CLFDB is to decentralise federal training expenditures for skills training to provincial training boards. Provincial and local, or sub-regional, training boards are to purchase training, according to local skills training plans. For example, the re-negotiation of the Canada-Ontario Training Agreement in October 1991 provided for annual spending of CD$1.6 billion on training and retraining in Ontario with federal contributions of CD$846 million and the provincial contribution of CD$751 million for 1991-92. The federal contribution contained CD$383 million of redirected Unemployment Insurance funds for training. The Agreement also provided for the establishment of The Ontario Training and Adjustment Board and for local training boards to control the spending of training funds, with

business, labour and community group representation.

The CLFDB itself receives funding from Employment and Immigration Canada, the federal ministry, to support its Secretariat, research staff and permanent and ad hoc subcommittees.

The Ontario Training and Adjustment Board is to have financial and administrative control over publicly-funded training and labour force development programmes. In 1991, combined federal and provincial expenditures on training and adjustment programmes in Ontario totalled over CD$1.5 billion.

The OTAB Governing Body is to assume financial responsibility for many existing provincial training programmes, including their staff, which are presently operated by the Ministry of Skills Development, The Ontario Training Corporation, other provincial ministries and programmes at local levels, such as Community Industrial Training Committees (CITCs) and joint business-labour union training programmes. This includes assumption of the "task of selecting and negotiating contracts with delivery agencies," currently performed by several provincial government ministries.

OTAB is to "work closely with government to define broad policy directions and identify the suitable level of public funds for each spending envelope." The "authority for expenditures on specific programmes within each envelope would rest with OTAB, although the agency's latitude to re-allocate funds between envelopes should be subject to government's consent."

Since private sector investment in training is acknowledged to be "inadequate," priority has been given to OTAB to increase private sector investment in training. The suggested mechanisms for increasing this investment include "levering" funds through sectoral agreements, or through "tied aid," or other forms of conditional assistance, or a training tax or levy. The Ontario government "believes that it should not set out for OTAB the specific means through which it should achieve the goal of increased private sector investment."

VI. Delivery of training

As noted in the introduction, all training in Canada is delivered at the provincial level. Although there are trades training streams at the secondary school level, the majority of pre-service training is delivered at the post-secondary level. In addition, apprenticeship training and in-service upgrading, and/or retraining is delivered at the post-secondary level in both institutions as well as on the job.

Canada's 160 community and technical colleges and institutes provide training in most technical, professional and commercial fields. There are geographic variations in programme availability, e.g., fishing technologies, mining and forestry technologies, agricultural technologies, petro-chemical technologies, etc. The Council of Ministers of Education, Canada noted in 1989 that "over 50 percent of [community college] training is for the preparation of technicians required for the manufacture of goods and the operation of equipment that were unknown twenty-five years ago."

In 1989-90, combined elementary and secondary enrolment in Canada was 5,071,800, with 1,900,710 at the secondary level, which comprises about 99 percent of the 6-16 year age cohort. Post-secondary enrolment was 832,000, with 512,422 enroled in universities, 315,150 enroled in community and technical colleges and institutes, and the remainder in other post-secondary programmes. Post-secondary enrolment has risen markedly, in spite of an overall population decline, due to a significant increase in participation rates. Currently, over 30 percent of the 18-24 year age cohort attends post-secondary education.

Full-time community and technical college enrolment increased dramatically from 166,000 in 1970-71 to 330,000 in 1984-85, but declined slightly in 1989-90 to 315,150, reflecting population decrease and current recessionary economic conditions. The current recession has precipitated a 24 percent increase in applications to the Ontario CAATs for 1992. Instructional staff totalled 23,500 in 1988-89.

Following twelve years of elementary and secondary education, students enter either universities or community colleges in the Provinces of Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland, Nova Scotia, Prince Edward Island, Saskatchewan and the Yukon and Northwest Territories. The territories have community colleges, but do not have universities. In Quebec, all students must attend two or three-year Colléges d'énseignement générale et professionelle (CEGEPS) after Grade Eleven, selecting programmes leading either to university or to receive training in specific occupations. In Ontario, although Grade 13 was "officially" eliminated in the 1984 reform, the OSIS credit system effectively necessitates most students completing their courses in thirteen, rather than twelve, years prior to entering either Colleges of Applied Arts and Technology (CAATs)or universities. Thus, both Ontario and Québec effectively have thirteen years of free public education, while other provinces only have twelve years.

Community and technical colleges and institutes offer one or two-year trades training programmes leading to Certificates and two or three-year technician, technologist and Business/Commercial programmes leading to Diplomas, as well as university-transfer programmes in several provinces. In Alberta, Saskatchewan and British Columbia, first and second-year university courses are also provided in community colleges. In contrast, it is not possible for Ontario CAAT Diploma graduates to fully transfer to universities. Currently, the Ontario CAAT system is to be evaluated - and possibly re-structured - under

the College Standards and Accreditation Council (CSAC).

Neither the Canadian Labour Force Development Board, nor the Ontario Training and Adjustment Board (or any other provincial training board) have policies or plans to "assume responsibility for the delivery" of training programmes. Delivery remains under the jurisdiction of individual provinces and the community and technical colleges which have autonomy within each province. The OTAB discussion paper notes that the CAATs "account for 70 percent of adult training activity in the province."

While apprenticeship is administered in Ontario by the Ministry of Skills Development, the CAATs provide the institutional component of apprentice training. Apprenticeship is organised under formal contracts entered into by the apprentice and his/her employer. Apprentices spend about 90 percent of their training programme learning on the job under the supervision of a journeyperson or supervisor, but attend CAATs on a block-release or day-release (one day per week) arrangement to "gain the knowledge and skills they might not be able to learn in the workplace." Apprenticeship is divided into periods, measured in total hours of school and work, with 1800-2000 hours equivalent to one year. In Ontario, employers must pay wages which are no less than the minimum wage. The average age of all apprentices in Canada is approximately 26 years, with only ten percent being below 21 years of age. This age range for apprentices is considerably higher than most other industrialised nations.

In Ontario a general machinist attends a CAAT three times during the four-year apprenticeship for Basic, Intermediate and Advanced periods lasting two months. While attending CAATs, apprentices receive financial support from the federal CEIC, under the Canada-Ontario Training Agreement. Ontario CAATs deliver training in 43 regulated apprenticeship programmes and 26 non-regulated apprenticeship programmes.

Community and technical colleges and institutes also assist employers in establishing on-the-job training programmes. Employers receive financial support for these programmes from the federal CEIC, under the relevant federal-provincial Training Agreement. While the provinces are responsible for establishing and maintaining apprenticeship, the federal government plays a purely financial role, which is currently about CD$84 million annually. The CLMPC Task Force report noted that "although the private sector is the key player in apprenticeship, there is little meaningful input by business and labour in the development of this system of advanced education and training. Although there have been provincial apprenticeship boards in all provinces except Ontario, they are often inactive or they have assumed passive roles. Furthermore, there is no co-ordinated apprenticeship approach by business and labour that is national in scope or strategic in intent."

The CLMPC Task Force cites a Labour Canada survey of major Canadian collective agreements that "indicates that 87 percent of union contracts contain provisions for some form of training." Many industries have "moved towards joint labour/management sponsorship of training opportunities." Several collective agreements provide for employers to establish training trust funds, while other employers have matched employee contributions, or given workers paid time off to attend classes and others have provided classroom space within the plant or office. In other cases, an entire industry, such as the steel industry, has sponsored training for employees facing layoffs. Similarly, an industry-wide programme, the Sectoral Skills Council, established a training fund for the electrical and electronics manufacturing industry, which employs 180,000 workers. In addition to upgrading training, and relocation training, these bi-partite programmes also provide job-search and basic literacy skills for those workers with less than high school levels of educational attainment. Many of these training programmes are undertaken in cooperation with community colleges.

The Ontario Training and Adjustment Board discussion paper noted that "experience with sectoral agreements in Ontario is relatively recent." The "cost of jointly determined training is shared by employers, workers and governments, on roughly an equal basis," with contributions negotiated between partners. "In some agreements, employers and employees both contribute directly into a form of trust fund, which is then used to finance training." In others, "the employee contribution is made on behalf of workers by the employer." OTAB is to "assume responsibility for encouraging such approaches and for contributing provincial funds to sectoral and inter-employer arrangements."

In addition to the conventional delivery of courses in community and technical colleges and institutes, Canada's geography and population dispersion have made it a pioneer in distance education. In 1988, the Association of Canadian Community Colleges (ACCC) surveyed 137 of the 160 institutions, of which 84 reported that they deliver instruction using open learning techniques. The most widely used media are printed correspondence materials, audio and videocassettes, audio-teleconferencing and computer-based-learning. In addition, fixed-image television cameras, electronic blackboards, computer-conferencing and both cable and broadcast television are utilised. Over 2,260 different courses were reported in the ACCC survey and at all 23 Ontario CAATs nine courses are available through distance learning. Of the total community and technical college enrolment of 510,738, 51,720 or ten percent enroled annually in open learning courses. In British Columbia, seven colleges produced more than 50 percent of the courses used and in Alberta eight out of the 13 colleges produced 80 percent or more original courseware. In Ontario, 14 CAATs produced over half the resources used by all 23 institutions in distance learning. For linguistic and cultural reasons, Québec CEGEPS produced nearly 100 percent of the resources used.

VII. Institutional planning and operations

As noted earlier, all education and training in Canada is decentralised at the provincial level. The 160 community and technical colleges and institutes are under provincial and territorial jurisdiction. At the provincial level, however, these colleges are centralised, either directly under the ministries of education or post-secondary education, or under a College of Regents, which in Ontario is delegated by the Ministry of Colleges and Universities to oversee the 23 CAATs at "arms length." While each college is autonomous, the degree of autonomy varies considerably from one province to another. Most colleges operate under a Board of Governors, appointed by the provincial government. Since there are no private colleges, or universities, in Canada, the majority of the financial resources received by colleges are from provincial budgets. In addition, as noted above, many colleges receive federal funding to support institutional and training in "seats" purchased by the CEIC for those referred by Canada Employment Centres (CECs).

Most curriculum development at Canadian colleges has been undertaken by individual institutions, as an aspect of their institutional autonomy. When provincial systems developed during the 1950s and 1960s curriculum development was often a bipartite undertaking. Many colleges established Advisory Committees with representation from industry to determine training needs and develop curricula. Occasionally, such committee structures were tripartite with the inclusion of labour union representation.

During the 1960s, a unique curriculum development system was developed at community colleges in the Maritime Provinces. The DACUM approach produces *Terminal Performance Objectives,* or TPOs, which are then used as inputs to the curriculum development process. DACUM is an acronym for Developing A CUrriculuM. The method resembles the Task Analysis approach, but rather than development by sending specialised personnel to analyse tasks in enterprises, DACUM brings curriculum developers together with management and union representatives. During three-to-five day sessions, (a) training objectives are determined, (b) industrial, or service, tasks are subordinated to each objective, and then (c) the most effective sequences and timing for training are determined. The process involves writing each task on a 3x5 inch card, which is placed below the appropriate objective on the wall of the conference room. After protracted discussion, agreement upon the placement of each card is attained and a photograph is taken of the wall. This photograph is then converted into a DACUM Chart for use in training programme design and/or curriculum development, usually by individual training institutions. However, the Ontario Ministry of Skills Development has centralised DACUM curriculum development during recent years, particularly for planning training for new occupations.

The determination of supply and demand for training is undertaken both at the federal and provincial levels. At the federal level, the CEIC has undertaken manpower and/or human resource planning (HRD) since the Technical and Vocational Training Act of 1960. The CEIC receives data from Statistics Canada, which undertakes periodic labour force surveys. In Ontario, manpower planning responsibilities were transferred from the Ministry of Labour to the Ministry of Skills Development upon its creation in 1985. The new Ontario Training and Adjustment Board will assume these functions and "conduct, integrate and analyse labour market research and data collected at the national, provincial, sectoral and local levels." In addition, OTAB is to "consult with labour market partners on their training needs and priorities for input into

the provincial-level planning process." It was also noted that "OTAB and the CLFDB will need to develop a range of formal and informal linkages as both bodies evolve."

An important pre-requisite for effective HRD planning is the availability of a dictionary of occupational classifications. In 1966, the Department of Manpower and Immigration [later the CEIC], in consultation with the Dominion Bureau of Statistics [now Statistics Canada], undertook preparation of the Canadian Classification and Dictionary of Occupations (CCDO). The first volumes were published in 1971 and 1972 and revisions are undertaken on a continuing basis to keep abreast of continuous changes in occupations and occupational structures. The CCDO supplements direct observation and job analysis methods with verification and validation methods and comparisons with the U.S. Dictionary of Occupational Titles (DOT) and the ILO International Standard Classification of Occupations (ISCO).

Since the 1982 National Training Act (NTA) targeted "nationally-designated" occupations and made training "consistent with labour market needs," training has become "a vehicle to increase international competitiveness by preventing the occurrence of shortages in trained manpower." The NTA "attempts to steer provincial educational and training systems towards the satisfaction of economic" needs by focusing upon manpower planning. The NTA continued the bifurcation of its predecessor act, The Adult Occupational Training Act of 1967, into "institutional" training and industry-based training. The CEIC is authorised, subject to provincial agreement, to enter into training agreements with private organisations, employer groups and non-profit organisations. A provision in the Canada-Ontario Training Agreements has permitted a provincial veto in cases where the training duplicated programmes offered in the CAATs.

In order to provide labour market information for the planning of both institutional training at the provincial level and industry-based training at the enterprise level, renewed emphasis was placed upon manpower planning. This renewed emphasis coincided with the development of The Canadian Occupational Projection System (COPS).

Until relatively recently, the manpower forecasting process was quite "mechanistic" and long-term skill availability data were unavailable, or incomplete. During the 1960s and 1970s, the federal government developed occupational forecasting methodologies, based on those developed by the U.S. Bureau of Labor Statistics and the OECD Mediterranean Regional Project. These efforts culminated in the development of The Canadian Occupational Projection System (COPS) from 1981 to 1988, which involved computerisation of occupational projection and its integration with economic forecasting. COPS is an attempt to synthesise economic modelling, manpower planning, and manpower training projection methodologies to yield the total picture of future trained manpower demand and supply.

COPS facilitates the availability of on-line computer data on trained manpower supply from provincial training institutions and demand from enterprises. As an interactive system, COPS is able to generate estimates of labour supply and demand, based upon different future scenarios. COPS can also pinpoint trouble-spots where supply may not meet demand, during a 3 - 5 year projection period, enabling corrective action to be taken. In order to compensate for inadequate data on demand resulting, for example, from the long-term effects of technological change on skill requirements, COPS has the built-in capability to utilise judgmental advice and information. During its developmental period through the 1980s, COPS incrementally added both data refinements and interactive capabilities to perfect its forecasting capabilities. While COPS was originally only accessible through on-line communication with mainframe computers, it is now available on diskette for use in stand-alone -- even laptop and notebook -- computers. At the provincial level, other HRD databases, such as the SkillsLink database, developed and operated by the Ontario Train-

ing Corporation, complement the federal COPS system.

Some critics have charged that Canada has entered a post-industrial society without having fully industrialised. This criticism reflects Canada's over-reliance since the 1940s upon the exploitation of its vast mineral resources of iron ore, uranium, nickel, petroleum, etc., its timber resources, its hydro-electric and nuclear power generation, its Atlantic and Pacific fisheries and its prairie grain production. As noted in the introduction, many LDCs have begun to produce similar resources at significantly lower cost - particularly labour costs. This scenario has had marked implications for the employment equation in Canada.

Manufacturing has developed unevenly across Canada and this has contributed to the uneven development of employment opportunities. Although manufacturing began to develop in the 1800s in Nova Scotia and other Atlantic provinces, these early developments were overshadowed by the centralisation of industries in Ontario and Québec since 1900. Aggressive programmes in the prairie provinces and British Columbia during the 1980s promoted the establishment, and relocation, of industries. In particular, Alberta has utilised wealth generated by its petroleum industry to promote industrial growth. However, in spite of these efforts, since 1983 Ontario created 50 percent of new employment opportunities and Québec created 25 percent of new employment opportunities, while the other eight provinces shared the remaining 25 percent.

According to the CLMPC Task Force report, the Canadian labour force "enjoyed very robust" growth, almost "doubling from 7.5 million in 1966 to its current level of almost 14 million" and "averaging nearly three percent (growth) per year." However, "employment fell sharply during the 1982-83 recession although it consequently rebounded strongly starting in 1984." This cyclic pattern is currently repeated with significant unemployment continuing since 1989. At the time this case study was prepared, the Canadian unemployment rate was 11.1 percent with 1,695,000 on the unemployment roll. Over 300,000 jobs were noted to have been "lost" during the current recession. A University of Toronto forecast projects employment rising to a "peak of 16.6 million in 2008 and then declin(ing) slowly to 16.5 million in 2013."

The Task Force report indicates that in the 1980s "and to a lesser extent in the (1970s), employment growth has been concentrated in the service sector. Goods-sector employment in 1988, for example, was barely above the 1981 level. The main explanation of this trend is the slower productivity growth in the service sector relative to the goods sector." "By 2013, the service sector is expected to represent around 80 percent of total employment, compared to 70 percent currently." During the 1980s, "two thirds of the net increase in employment has been in managerial and professional occupations, due in particular to robust demand for health professionals, financial managers, and in service management occupations." Employment and Immigration Canada forecasts that "one third of the net jobs that will be created over the 1986-2000 period will be in the managerial/administrative category and an additional 23 percent in the social sciences, medicine/health, natural sciences and engineering, teaching and arts/recreation. Service, sales, and clerical occupations are expected to account for 36 percent of the remaining net increase in employment, with all remaining occupations responsible for only eight percent." However, in marked contrast with previous economic recessions, managerial occupations have been affected during the current recession. This trend parallels current reductions in levels of management (from five to three levels) evident world-wide, and related to the emulation of the Japanese approach to business and industry organisation.

With the shift of productive sectors towards high-technology, export-oriented industries and the marked growth of the service and informatics sector, significant industrial restructuring - and concomitant unemployment - has taken place. With the contraction of the resource sectors and goods-producing sectors, productivity increases have resulted from

the adoption of capital-intensive, automated production and extraction equipment, in order to remain competitive internationally. This restructuring, or "structural adjustment," has had a deleterious impact upon employment and unemployment. With plant closings in industries unable to remain competitive, or which have re-located to countries with lower wage costs (such as the USA and Mexico), and contraction in the extractive industries, the greater part of those unemployed have been older workers and those with less than a Grade Ten education. Unfortunately, these two groups have proved to be quite difficult to retrain. It is no longer possible for secondary school dropouts to obtain secure, life-long employment in either manufacturing or extractive industries. In the face of these realities, the 30 percent high school dropout rate, noted earlier, assumes crisis proportions.

VIII. Testing and certification

Trade testing and certification is, primarily, undertaken at the provincial level, as this is considered to be under provincial jurisdiction as a component of the exclusive provincial responsibility for education. Apprenticeships are established, regulated and administered by provincial governments. All provinces except Ontario have provincial apprenticeship boards. Unfortunately, according to the CLMPC Task Force report, these boards "are often inactive or they assume passive roles." In Ontario, apprenticeship is under the jurisdiction of the Ministry of Skills Development. Provinces designate which occupations are apprenticeable and which are compulsory. In addition, provinces establish wage rates for apprentices, prescribe the content and duration of training, establish certification requirements, administer examinations and issue certificates of qualification. A registry of apprentices is maintained by each province.

In order to successfully complete an apprenticeship in any occupation, an apprentice must write and pass the final Certificate of Qualification examination. Those who are successful will receive both Certificates of Qualification and Apprenticeship. A passing grade is 60-65 percent. In certain regulated skilled occupations, certification is compulsory and only holders of a Certificate of Qualification or registered apprentices are able to work in these occupations. Regulated occupations with voluntary certification do not require Certificates of Qualification and Apprenticeship, but some unions and employers require them because they indicate the attainment of a certain level of skill. Ontario CAATs offer apprenticeship training in 43 regulated trade areas, as well as in 26 non-regulated occupations.

However, in 1959 the Interprovincial Standards Programme (ISP) to facilitate labour mobility established the "Red Seal Trades" programme to test and certify designated critical skill trades. The ISP "Red Seal Trades" programme comprises 28 of the 170 apprenticeable trades in Canada. Approximately 70 percent of all apprentices are in Red Seal trades. Apprentices must first hold (or be qualified to hold) a provincial Certificate of Qualification in order to be eligible to write a Red Seal examination. A grade above 69 percent on the examination entitles the apprentice to the ISP Red Seal, which permits the practise of that occupation across Canada without further examination. The examinations are developed by the Interprovincial Standards Programme Co-ordinating Committee comprised of Directors of Apprenticeship from each province and territory and two represenatives of EIC. The examinations are revised every two to three years and each province involved with that trade must unanimously accept the examination.

The number of government-sponsored apprentices rose from 58,200 in 1966-67 to 67,500 in 1987-88. Both total employment and the number of apprentices have increased since 1974, indicating that in spite of cyclical fluctuations the system is healthy in Canada. In 1976, the ten largest apprenticeable occupations registered 65,108 new apprentices, which comprised 65.3 percent of all apprentices in Canada. Statistics Canada data indicate that on average 13 percent of total registered apprentices leave the programme each year. The ratio of discontinuations to completions annually is about 1:1.3, or a "quit rate" of about 33 percent. Between 1974 and 1986, withdrawals from apprenticeship contracts in the ten occupations with the largest apprenticeship enrolment averaged 42.6 percent. In 1988, of the 11,451 apprentices sitting provincial examinations 9,302 passed, while 13,466 of the 19,557 candidates passed the federal Red Seal examinations.

While the Canadian Labour Force Development Board has no responsibility for trade testing and certification, its mandate appears to extend the federal ISP Red Seal involvement, since one of the CLFDB roles is "the mobilisation of private sector efforts to modernize and put in place standards of skills for certification of occupational competence." The CLFDB may 'recommend' "standards for skills training and certification to promote access and portability."

The Ontario Training and Adjustment Board is to assume responsibility for all provincial programmes supporting the apprenticeship system. OTAB is charged with continuing the reform of the apprenticeship system "in areas where consensus exists that reform is most needed." It was noted that "broad agreement is already evident" that the number of apprentices should be increased and programmes should be expanded into new occupations and workplaces, the availability of apprenticeships for women and other underrepresented groups should be improved, and apprenticeships should be expanded into the school-to-work transition programmes for youth. OTAB is also charged with the "development of an accreditation system to ensure that earned credits are transferable among training providers." The Ontario Training Corporation is currently investigating the issues of competencies, standards and potential certification mechanisms for trainers within industry.

OTAB is to be "responsible for implementing substantial qualitative and quantitative improvements in workplace and sectoral training". These are to include the "increased emphasis on portable, generic and certifiable skills."

IX. Perceptions of training and training boards

Since both the CLFDB and OTAB have only just been established, it is somewhat premature to evaluate their value and performance. However, it should be noted that the past year has been marked by a radical restructuring of the entire training infrastructure in Canada. This restructuring is indicative that there was considerable disquiet with the *status quo ante* on the part of governments (federal, provincial and local), employers and labour unions. It was noted earlier that the 1981-82 economic recession has generated considerable attitudinal change on the part of all three groups and this has, in turn, resulted in the initiation of many new programmes. Foremost among these new programmes are the tri- and quadripartite training board structures evolving at the federal, provincial and local levels. It can only be hoped that these initiatives will be sufficient to strengthen Canada's international competitiveness in a changing world market.

However, the perceptions reflected in the studies which led to the establishment of the CLFDB provide an indication of the thinking which precipitated the radical restructuring of the Canadian training infrastructure.

The 1988 Report of The Ontario Premier's Council called for "technological innovation, a highly trained workforce, facility in marketing and a high degree of productivity" to ensure future prosperity.

The CLMPC Task Force report indicated that "technological advances are significantly altering economic activity" and "raising skills requirements." Consequently, "workers already in the workforce will need to be retrained regularly." "The effective application of new forms of technology will be the single most important source of job creation, wealth and value-added in the years ahead." In the next decade, it was noted that "almost half the new jobs created will require more than five years of combined education and training beyond the completion of high school." The report concluded that "Canada's ability to compete in a knowledge-based, technology-driven world will increasingly depend on its success in training and retraining workers."

Canada has established traditions and practices which preclude the introduction of innovative measures to finance training. Debate prior to the establishment of the CLFDB weighed alternatives and documented attitudes regarding financing systems. While on the one hand it was acknowledged that "corporate income tax policies have a major impact on the behaviour of Canadian companies, it was felt that levy-grant schemes "entail the creation of a vast bureaucracy to collect taxes (and) remit grants." While not recommending a levy-grant system, the CLMPC Task Force study did recommend, on the other hand, a national training target of at least one percent of payroll to support private sector training. It was also felt that levy schemes encourage "bureaucratic interference in private decision-making." Rather, a "tax incentive approach to private sector training" was favoured, since "the administrative and bureaucratic costs involved are relatively small." It was concluded that such tax incentive mechanisms "can be designed in a flexible manner to provide both for approved on-the-job training as well as institutional training." Labour representatives on the Task Force, however, did recommend a levy-grant system in their minority report.

The *Learning Well ... Living Well* discussion paper on the development of a "training culture" listed basic skills identified by employers that are needed for a lifetime of learning; they include:

- the ability to learn (the most basic skill of all);
- reading, writing and computation;

- oral communication and listening skills;
- problem solving and creative thinking;
- skills and values needed to achieve high self-esteem, motivation and goal setting;
- employability and career development skills;
- interpersonal skills, teamwork and negotiation;
- understanding organisational culture and sharing leadership.

The discussion paper also noted that "a future learning system that stresses relevant skills for all" should enable workers "throughout their lifetime, to learn new skills continually and absorb new knowledge" This requires skills to:

- apply mathematical and scientific principles in a work setting;
- adapt to, and operate comfortably in, a rapidly changing technological environment;
- continually retrain and upgrade skills;
- operate effectively in team environments, often with people of different social and cultural backgrounds;
- work effectively ... in the languages of competitor nations;
- be entrepreneurial and innovative in many areas, not only in design and research and development, but in the management of people and information.

Muszyinski and Wolfe (1989) argued that "overall, Canada lags behind other countries in adopting new technology, and this lag has been linked to a poor showing in our international economic competitiveness. They cited the World Competitiveness Report, which noted that Canada ranked sixth in the introduction of new technologies among 22 OECD countries, lagging particularly in factory automation. Since "the implications of these changes for both skill levels and training needs are potentially far-reaching," they called for attitudinal changes on the part of Canadian employers, "the development of hybrid skills or occupations that combine the skill/knowledge training of previously distinct occupations," and noted that "greater co-operation between the three levels of government in devising a comprehensive framework for training policy is urgently needed."

These sentiments were echoed by McFadyen and Marshall (1989), who stated that "the lack of a generalized private sector commitment to skills training and labour market development in Canada and, more specifically, Ontario is a common lament in labour market policy circles." "The under-investment in training by employers is one of several factors that combine to create a disequilibrium between the skills required and those available in the labour market." This comment was recently validated by the CEIC, which noted that the current recession was marked by the ironic disequilibrum that there were over 300,000 high-skill positions which could **not** be filled, while over 1.6 million were unemployed.

McFadyen and Marshall also observed that "there are a number of overlapping and related reasons that ... explain why employers do not engage in training." These included: the habituation of employers to publicly-funded institutional training, concern that the development of a "training culture" "might distract from the firm's focus on production," and the high cost of training, suggesting that training was viewed as a production cost, rather than an investment.

X. Conclusions

During the past two years, considerable attention has been paid in Canada to issues concerning international competitiveness, workforce adjustment, training and re-training. As a consequence, the entire training "picture" in Canada has been changed markedly - thus far largely on paper. The major change has been the establishment in 1990 of The Canadian Labour Force Development Board and the planning for the establishment of a hierarchical provincial and local training board infrastructure. The Ontario Training and Adjustment Board is the first of the provincial boards to be developed and should become operational during 1992. Other provincial training boards are at the developmental stage.

As has been shown, the lack of a national co-ordinating mechanism for all aspects of training in Canada has been a reflection of Canada's unique historical context. This context includes the constitutional reservation of responsibility for education and training for the ten provinces and two territories. A counter-trend since 1910 has been federal government encroachment upon provincial powers with the infusion of federal funds into occupational training and post-secondary education. The development of a hierarchical federal-provincial-local training board infrastructure suggests a new period of federal-provincial co-operation, rather than encroachment.

The new Canadian Labour Force Development Board and The Ontario Training and Adjustment Board have drawn elements from "established" national training boards in Germany, Sweden, the United Kingdom and elsewhere to design an infrastructure which is perceived to be appropriate and relevant to the Canadian context. Changing employer, government, labour union and educational/training institution attitudes suggest that these endeavours are likely to succeed in redressing the economic, political and structural problems faced by Canada during the current (and 1982-83) recessions. It is hoped that this attitudinal change will foster the development of a "training culture" that has proven successful in Germany, Japan and several of the NICs.

Responsibility for the delivery of training in Canada's 160 community and technical colleges varies with each of the ten provincial and two territorial post-secondary educational systems. To date, these institutions have only been loosely co-ordinated nationally by means of The Association of Canadian Community Colleges (ACCC). However, the development of a hierarchical federal-provincial-local training board infrastructure is likely to introduce greater co-ordination and co-operation.

Since neither the CLFDB nor provincial and local training boards have operational responsibility for the delivery of training, this factor could have consequences for the success, or failure, of current initiatives. The "key" factor operative here is that the community and technical colleges have long jealously guarded their autonomous control over curriculum development. It is hoped that initiatives by the training boards and by the provincial ministries, such as the Ontario CSAC review, will foster greater co-operation between the colleges and their "consumers," both public and private.

The College Standards and Accreditation Council (CSAC) initiative in Ontario will likely complement federal-provincial co-ordination with the rationalisation of any duplication of programmes among the 23 CAATs in Ontario. In addition, the determination of system-wide standards for all CAAT programmes should facilitate co-operation with OTAB and local training boards.

Such co-operation can only benefit Canadian business and labour through the

provision of "portable" skills. The Interprovincial Standards Programme (ISP), or "Red Seal Trades," federal initiative dating from the 1950s is also likely to benefit from these new initiatives. It may also be timely to consider an extension of the ISP initiative beyond its long-standing 28 (of 170) apprenticeable trades. Certainly, standardisation of qualifications in the informatics and service sectors is worthy of consideration. While training in these areas is not apprenticeable, issues of quality control and standardisation will certainly impact upon future economic performance.

The mandates of the CLFDB and OTAB also include the "thorny" issue of standards and potential certification mechanisms for trainers operating within business and industry. Ontario is cautiously exploring this issue, which has the potential to significantly influence the success (or failure) of the new training board infrastructure. At the present time, literally anyone can "sell" his/her services as a trainer with no "quality control."

Undoubtedly, the most contentious aspect of the new training board infrastructure is the issue of financing. While Canadian business resisted efforts of the labour union representatives to adopt a levy system, the CEIC decision to divert ten percent of Unemployment Insurance funds from income maintenance to support training was not well received in many sectors. Unions are particularly averse to the use of UI funds to retrain employed workers, while supportive of their use to train the unemployed. Since UI funds are, literally, a tax upon both labour and management, this approach differs significantly from the levy "model," as applied elsewhere. The CEIC decision would probably have been less contentious if the federal government had not chosen to end its contributions to the UI pool. Making UI self-financing during the height of a difficult economic recession may not have been the wisest possible policy decision.

Among the issues that are likely to determine the success, or failure, of the new Canadian training board infrastructure are: (a) whether the 30 percent high school dropout rate can be mitigated (either through efforts to retain students in school or through "second-chance" initiatives), (b) whether the type of training offered can meet needs in business and industry, (c) whether the amount of training offered can be increased, (d) whether the quality of training can be improved, and (e) whether the training profession is amenable to the adoption of defined standards and certification mechanisms.

Although the Canadian high school dropout rate is the highest of any industrialised nation, this phenomenon is "balanced" by the fact that Canada has one of the most developed "second-chance," adult and continuing education infrastructures of any nation. Moreover, one impact of the 1982-83 recession and the current economic recession is the trend for students at the secondary and post-secondary levels to either remain in school, or to return to school to upgrade their employable skills. The current enrolment pressures on Adult High Schools and community and technical colleges are among the highest ever recorded. This suggests that the "message" has been received by "consumers" of education and training. Whether or not this will be a continuing trend, once the economy improves, is questionable.

Unfortunately, a large part of the training offered, or purchased, by Canadian business and industry deals with aspects of sales and management, rather than production and quality improvement. McFadyen and Marshall noted that employer-sponsored training focused (in descending order) upon management, sales staff, customer service employees, production workers, skilled labour and clerical staff. Moreover, they noted that training tended to be of short duration, with 65 percent of employer-sponsored training being of two weeks duration, or less. This suggests that a considerable proportion of current training efforts are irrelevant to the productive processes. On the other hand,it is encouraging that an increasing number of enterprises are investing in training designed to improve the quality, efficiency and competitiveness of their produc-

tion. If this is indeed a trend, then it should be nurtured and encouraged, particularly in a country which exports 25 percent of its GNP.

Similarly, the amount of training offered requires improvement; particularly when compared with the volume of training offered in nations which compete with Canada in the international marketplace. With apprentices comprising only 1.1 percent of total employment, in comparison to 7.4 percent in Austria, 7.1 percent in Germany, and 1.4 percent in the U.K., the new training board infrastructure has its work cut out to improve Canadian investment in both apprentice and in-service training/retraining. Of course, this factor must also be addressed by the educational infrastructure, since as noted earlier, during the 1990s nearly half of the new jobs will require more than five years of combined education and training beyond the completion of high school. At the very least, the 0.5 percent of business and industrial payroll now devoted to training should be doubled. In addition, the $1.4 billion spent on formal training must be made more cost-effective through investment in more appropriate training.

The quality of training must be addressed by both the "purchasers" and the providers of training. This implies improved needs analyses, a better understanding and appreciation of training on the part of employers (i.e., the internalisation of a "training culture"), and improvement in the competencies of trainers, plus the delineation and adoption of standards. The issue of whether trainer competencies and standards should be taken one step further with the adoption of certification and/or licensing mechanisms must also be addressed.

As noted earlier, the reform of the Canadian training infrastructure is too recent to be assessed. However, it can be said that sufficient attitudinal change on the part of "actors" in government, business, the labour movement and the educational and training sectors appears to have taken place. While it is also too early to determine whether the internalisation of a "training culture" has taken place, the overall picture is encouraging. Therefore, Canada has a unique opportunity to renew and reform its training infrastructure and revitalise its international economic competitiveness.

This revitalisation appears to have designed a training board infrastructure which draws elements from "success models," such as Germany, Japan, Sweden and elsewhere. While the Canadian "magic number" of 22 training board members is less than the unwieldy 50 of the German BiBB, the new infrastructure appears to have adopted the tri- (and quadri) partite representativeness of BiBB and other national training boards. The open question is whether these representatives are committed to making the new systems work. The next few years should provide the answers to this question.

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